

Version with Markings to Show Changes Made

1. (Three Times Amended) Apparatus to adapt a common telephone for operation as a speakerphone, comprising:

a loudspeaker for producing sounds in a local vicinity of said apparatus;

a microphone adaptively attached to a said apparatus; and

an audio module adapted for removable interfacing to a handset jack of a base unit of a telephone to adapt said common telephone for operation as a speakerphone through said loudspeaker and said microphone;

wherein said audio module is portable for transportation between common telephones.

REMARKS

Claims 1-25 remain pending in the application.

Interview with the Examiner

The Applicants thank the Examiner for the interview conducted on March 12, 2003. A discussion of the cited prior art and the claimed invention resulted in an agreement by the Examiner that the cited prior art fails to anticipate or make obvious the claimed invention, i.e., adapting a telephone to operate as a speakerphone.

Claims 1-3, 12, 13, 16 and 18-20 over Acree

In the Office Action, claims 1-3, 12, 16 and 18-20 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Acree, U.S. Patent No. 5,099,514 (“Acree”), with claim 13 allegedly obvious over Acree in view of well known prior art (“WKPA”). The Applicants respectfully traverse the rejection.

Claims 1-3, 12 and 13 recite, *inter alia*, an audio module adapted for removable interfacing to a handset jack of a base unit of a telephone to adapt a common telephone for operation as a speakerphone through a loudspeaker and a microphone. Claims 16 and 18-20 recite, *inter alia*, temporarily connecting a loudspeaker and a microphone to a handset connection on a base to convert a common telephone into a speakerphone.

Acree appears to disclose a multi-purpose telephone accessory unit for persons who use a telephone for extended periods of time (Abstract). The telephone accessory unit has a headset, an AC/DC transformer, and a housing (Acree, col. 3, lines 31-32). A telephone line is connected to the housing unit at a telephone line interface (Acree, col. 3, lines 53-56). A headset unit including a mouth piece microphone is used to communicate with the telephone line (Acree, col. 3, lines 46-52). Alternately, the housing unit contains an internal microphone for communication with the telephone line (Acree, col. 3, lines 42-45).

WKPA is relied on to teach a telephone line interface (Office Action, page 9). Acree discloses a telephone line interface 32 (Acree, Fig. 1).

Acree discloses a multi-purpose telephone accessory unit that replaces a telephone. The multi-purpose telephone accessory unit is convenient because it includes a headset for extended use. A headset allows only its wearer to hear a telephone conversation and is not comprised of a loudspeaker. Acree's multi-purpose accessory unit does not include a loudspeaker for it to operate as a speakerphone.

Acree fails to disclose converting and adapting a common telephone for operation as a speakerphone, much less utilizing a loudspeaker, as respectively claimed by claims 1-3, 12, 13, 16 and 18-20.

A benefit of converting and adapting a common telephone into a speakerphone is, e.g., a choice of using a common telephone or a speakerphone. Acree only allows the multi-purpose accessory unit to act as a corded telephone with a microphone, tying a user to a corded distance from multi-purpose accessory unit. Adding speakerphone capability to a common telephone allows a use to either use the common telephone for private conversations or use the speakerphone for free-roaming hands free conversations.

Accordingly, for at least all the above reasons, claims 1-3, 12, 13, 16 and 18-20 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 4, 5 and 7-11 over Acree in view of Arbel

In the Office Action, claims 4, 5 and 7-11 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Acree in view of Arbel, U.S. Patent No. 4,912,758 ("Arbel"). The Applicants respectfully traverse the rejection.

Claims 4, 5 and 7-11 are dependent on claim 1, and are allowable for at least the same reasons as claim 1.

Claims 4, 5 and 7-11 recite, *inter alia*, an audio module adapted for removable interfacing to a handset jack of a base unit of a telephone to adapt a common telephone for operation as a speakerphone through a loudspeaker and a microphone.

As discussed above, Acree fails to disclose adapting a common telephone for operation as a speakerphone utilizing a loudspeaker, as claimed by claims 4, 5 and 7-11.

The Office Action relies on Arbel to allegedly make up for the deficiencies in Acree to arrive at the claimed invention. The Applicants respectfully disagree.

Arbel appears to disclose a full-duplex digital speakerphone that includes a room echo cancellation adaptive filter and a trunk echo cancellation adaptive filter (Abstract). The speakerphone eliminates error signals related to either A-Law or Mu-Law quantization and linearity errors (Arbel, col. 2, lines 32-35).

Arbel discloses eliminating problems associated with full-duplex digital speakerphones. Arbel fails to disclose a common telephone, much less adapting a common telephone for operation as a speakerphone utilizing a loudspeaker, as claimed by claims 4, 5 and 7-11.

Neither Acree nor Arbel, either alone or in combination, disclose, teach or suggest an audio module adapted for removable interfacing to a handset jack of a base unit of a telephone to adapt a common telephone for operation as a speakerphone through a loudspeaker and a microphone, as claimed by claims 4, 5 and 7-11.

Accordingly, for at least all the above reasons, claims 4, 5 and 7-11 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 14, 17, 18, 21 and 22 over Acree in view of Papadopoulos

In the Office Action, claims 14, 17, 18, 21 and 22 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Acree in view of Papadopoulos, U.S. Patent No. 5,623,544 ("Papadopoulos"). The Applicants respectfully traverse the rejection.

Claims 14, 17, 18, 21 and 22 are dependent on claims 1, 16 and 20 respectively, and are allowable for at least the same reasons as claims 1, 16 and 20.

Claim 14 recites, *inter alia*, an audio module adapted for removable interfacing to a handset jack of a base unit of a telephone to adapt a common telephone for operation as a speakerphone through a loudspeaker and a microphone. Claims 17, 18, 21 and 22 recite, *inter alia*, temporarily connecting a loudspeaker and a microphone to a handset connection on a base to convert a common telephone into a speakerphone.

As discussed above, Acree fails to disclose converting and adapting a common telephone for operation as a speakerphone utilizing a loudspeaker, as claimed by claims 14, 17, 18, 21 and 22.

The Office Action relies on Papadopoulos to allegedly make up for the deficiencies in Acree to arrive at the claimed invention. The Applicants respectfully disagree.

Papadopoulos appears to disclose a telephone headset interface circuit that is coupled to a telephone line to extract power for use by a headset amplifier (Abstract). A switch provides compatibility of the telephone headset interface circuit with telephones of various types (Papadopoulos, col. 10, lines 44-47).

Papadopoulos fails to even mention a speakerphone or a loudspeaker. Papadopoulos fails to disclose, teach or suggest converting and adapting a common telephone for operation as a speakerphone utilizing a loudspeaker, as respectively claimed by claims 14, 17, 18, 21 and 22.

Neither Acree nor Papadopoulos, either alone or in combination, disclose, teach or suggest converting and adapting a common telephone for operation as a speakerphone utilizing a loudspeaker, as respectively claimed by claims 14, 17, 18, 21 and 22.

Accordingly, for at least all the above reasons, claims 14, 17, 18, 21 and 22 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claim 15, 24 and 25 over Acree in view of McDuffee

In the Office Action, claims 15, 24 and 25 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Acree in view of McDuffee, U.S.

Patent No. 6,002,945 (“McDuffee”). The Applicants respectfully traverse the rejection.

Claims 15, 24 and 25 are dependent on claims 1 and 20 respectively, and are allowable for at least the same reasons as claims 1 and 20.

Claim 15 recites, *inter alia*, an audio module adapted for removable interfacing to a handset jack of a base unit of a telephone to adapt a common telephone for operation as a speakerphone through a loudspeaker and a microphone. Claims 24 and 25 recite, *inter alia*, temporarily connecting a loudspeaker and a microphone to a handset connection on a base to convert a common telephone into a speakerphone.

As discussed above, Acree fails to disclose **converting** and **adapting** a common telephone for operation as a **speakerphone** utilizing a **loudspeaker**, as respectively claimed by claims 15, 24 and 25.

McDuffee appears to teach a radio frequency two-way electronic communications device incorporating features of both a mobile pager and a cellular phone (Abstract).

McDuffee fails to even mention a speakerphone or a loudspeaker.


Neither Acree nor McDuffee, either alone or in combination, disclose, teach or suggest **converting** and **adapting** a common telephone for operation as a **speakerphone** utilizing a **loudspeaker**, as respectively claimed by claims 15, 24 and 25.

Accordingly, for at least all the above reasons, claims 15, 24 and 25 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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